SYLLABUS

1. Number & Name: 11:117:100 – INTRODUCTION TO BIOENVIRONMENTAL ENGINEERING

2. Credits and contact hours: 1 credit, 1-50 min. lecture period per week

3. Instructor: Christopher G. Uchrin, and other guest lecturers

4. Text: None

5. Specific Course Information


   b. Prerequisites: none

   c. Course Type: Required for transfer and 5-year students

6. Course Goals

   a. Specific Instructional Outcomes: Students will be versed in the various career opportunities available in bioenvironmental engineering from practitioners in the field. Students will obtain an understanding of professional responsibility and ethics. Students will obtain an awareness of the need for professional registration and continued development through the participation in professional societies.

   b. Specific Student Outcomes addressed by the course include:

      f. Understanding of professional and ethical responsibility
         Instructional Activity: Students attend lecture on engineering ethics
         Assessment Activity: Two questions are on final exam

      i. Recognition of the need for, and ability to engage in life-long learning
         Instructional Activity: Eight presentation are made by practicing environmental engineers focused, in part, on the need to become active in professional societies and stay current in the field
         Assessment Activity: Attendance is mandatory and contributes to final grade.

      j. Knowledge of contemporary issues
         Instructional Activity: Eight presentation are made by practicing environmental engineers focused, in part, on contemporary and topical projects.
**Assessment Activity:** Each lecturer provides questions for the course final exam.

7. **Topics (Preliminary schedule, subject to change):**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Topic</th>
<th>Lecturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Dr. Uchrin, P.E.</td>
</tr>
<tr>
<td>2</td>
<td>Sustainability</td>
<td>Dr. Krogmann</td>
</tr>
<tr>
<td>3</td>
<td>Hazardous Waste Engineering</td>
<td>Dr. Huang</td>
</tr>
<tr>
<td>4</td>
<td>Engineering Ethics</td>
<td>Dr. Uchrin, P.E.</td>
</tr>
<tr>
<td>5</td>
<td>Stormwater Engineering</td>
<td>Dr. Obropta</td>
</tr>
<tr>
<td>6</td>
<td>Energy</td>
<td>Dr. Both, P.E.</td>
</tr>
<tr>
<td>7</td>
<td>Remediation</td>
<td>Dr. Fennell</td>
</tr>
<tr>
<td>8</td>
<td>Consulting Engineering</td>
<td>Dr. Ray Ferrara</td>
</tr>
<tr>
<td>9</td>
<td>Consulting Engineering</td>
<td>BEE Alumnus</td>
</tr>
<tr>
<td>10</td>
<td>Air Pollution Engineering</td>
<td>Dr. Miskewitz</td>
</tr>
<tr>
<td>11</td>
<td>Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

Grading:     
Attendance 50%
Term Essay 25%
Final Exam 25%

Term Essay: Each student is required to write and submit a short (2 page max.) essay, due at the final exam, addressing the following:

1. What is the source of the water I use at home?
2. Where and how is it treated?
3. Where does the wastewater go and how is it treated and disposed?

Prepared by: Christopher G. Uchrin 05/25/17